

Piceance Energy LLC - EBUS

Piceance 28-07M

**Patterson 306**

## **Post Job Summary**

# **Cement Production Casing**

Date Prepared: 08/5/2015  
Job Date: 07/31/2015

Submitted by: Keven Nye – Grand Junction Cement Engineer

## The Road to Excellence Starts with Safety

Sold To #: 344919	Ship To #: 3672970	Quote #:	Sales Order #: 0902622006
Customer: PICEANCE ENERGY LLC - EBUS		Customer Rep:	
Well Name: PICEANCE		Well #: 28-07M	API/UWI #: 05-077-10240-00
Field: VEGA	City (SAP): COLLBRAN	County/Parish: MESA	State: COLORADO
Legal Description: SW NW-28-9S-93W-1591FNL-1237FWL			
Contractor: PATTERSON-UTI ENERGY		Rig/Platform Name/Num: PATTERSON 306	
Job BOM: 7523			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HX41066		Srv Supervisor: Andrew Brennecke	

### Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	8065ft Job Depth TVD 7884
Water Depth	Wk Ht Above Floor 4
Perforation Depth (MD)	From To

### Well Data

Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing		8.625	7.921	32			0	1570		0
Casing		4.5	4	11.6		I-80	0	8065		0
Open Hole Section			7.875				1570	8075	0	0

### Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	4.5	1	HES	8065	Top Plug	4.5	1	HES
Float Shoe					Bottom Plug	4.5	1	HES
Float Collar	4.5	1	HES	7979	SSR plug set			
Insert Float					Plug Container	4.5	1	HES
Stage Tool					Centralizers	4.5	135	HES

### Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty

### Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Tuned Spacer III	Tuned Spacer III	40	bbl	11	4.55	30	4	
37 gal/bbl		FRESH WATER							
123.25 lbm/bbl		BARITE, BULK (100003681)							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	VersaCem	VERSACEM (TM) SYSTEM	938	sack	12.8	1.75		8	8.5
0.25 lbm		POLY-E-FLAKE (101216940)							
6 lbm		KOL-SEAL, BULK (100064233)							
8.53 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	ExpandaCem GJ4	EXPANDACEM (TM) SYSTEM	413	sack	13.3	1.89		8	8.66
20 %		SS-200 - BULK (102240841)							
0.25 lbm		POLY-E-FLAKE (101216940)							
8.66 Gal		FRESH WATER							
6 lbm		KOL-SEAL, BULK (100064233)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Displacement	Displacement	123.7	bbl	8.34			8	
0.01 gal/bbl		MICRO MATRIX CEMENT RETARDER, 1 GAL PAIL (100003780)							
0.05 gal/bbl		CLA-WEB - TOTE (101985045)							
Cement Left In Pipe		Amount	85 ft		Reason		Shoe Joint		
Comment									

# Summary Report



Crew: \_\_\_\_\_

Job Start Date: 7/31/2015

Sales Order #: 0902622006  
WO #: 0902622006  
PO/AFE #: 15-111

Customer:	PICEANCE ENERGY LLC - EBUS	Field:	VEGA	Job Type:	CMT PRODUCTION
UWI / API Number:	05-077-10240-00	County/Parish:	MESA	Service Supervisor:	CASING BOM
Well Name:	PICEANCE	State:	COLORADO		Andrew Brennecke
Well No:	28-07M	Latitude:	39.250975	Cust Rep Name:	
		Longitude:	-107.779419	Cust Rep Phone #:	
		Sect / Twn / Rng:	28/9/93		

**Remarks:**

<b>The Information Stated Herein Is Correct</b>	Customer Representative Signature	Date
	Customer Representative Printed Name	

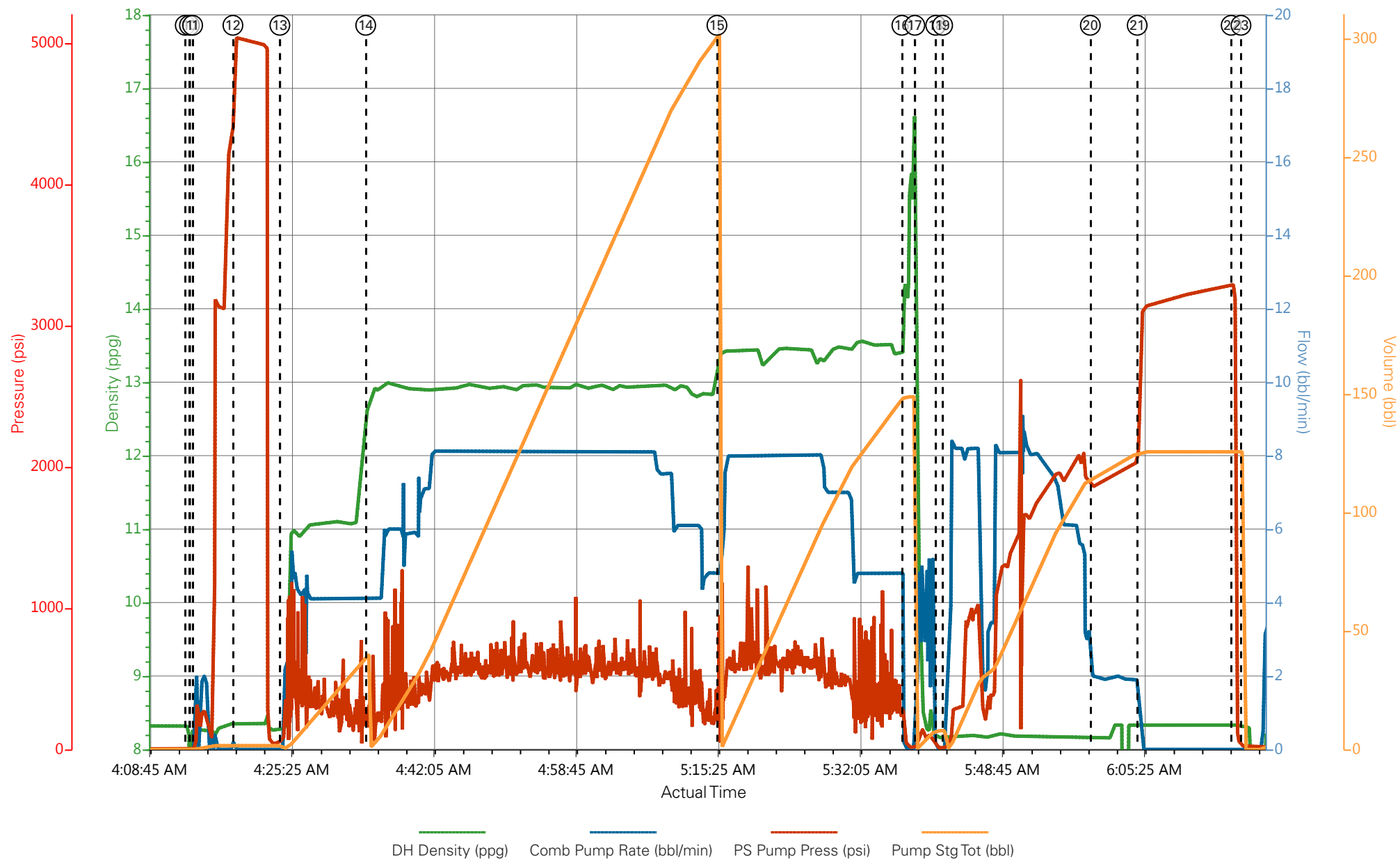
## 1.0 Real-Time Job Summary

## 1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	7/31/2015	19:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	7/31/2015	21:45:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	Crew Leave Yard	7/31/2015	22:00:00	USER					
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	8/1/2015	00:01:00	USER					RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	8/1/2015	00:45:00	USER					
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	8/1/2015	01:15:00	USER					ALL HES PRESENT
Event	7	Rig-Up Completed	Rig-Up Completed	8/1/2015	03:00:00	USER					1-ELITE, 2-660 BULK TRAILERS, 1-SILO, 2" PUMP IRON, 4" SUCTION HOSE, 4.5" QUICK LATCH PLUG CONTAINER, 1-550 PICK UP
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	8/1/2015	03:30:00	USER					ALL HES AND RIG CREW PRESENT
Event	9	Start Job	Start Job	8/1/2015	04:13:15	COM5	8.32	0.00	0.00	0.0	TD-8075', TP-8065', CSG-4.5" 11.6# 180, SJ-85.07', SCSG-0-1570', 8.625" 32#, OH-7.875", MUD-9.4PPG
Event	10	Drop Bottom Plug	Drop Bottom Plug	8/1/2015	04:13:45	USER					
Event	11	Prime Pumps	Prime Pumps	8/1/2015	04:14:07	COM5	8.33	2.00	290.00	2.0	FRESH WATER
Event	12	Test Lines	Test Lines	8/1/2015	04:18:50	COM5	8.36	0.20	5039.00	2.2	ALL PRESSURE HELD ON

											LINES
Event	13	Pump Spacer 1	Pump Spacer 1	8/1/2015	04:24:20	COM5	11.00	4.00	330.00	40.0	TUNED SPACER III, 40 BBLS, 11PPG, 4.55CF/SK, 30GAL/SK
Event	14	Pump Lead Cement	Pump Lead Cement	8/1/2015	04:34:24	COM5	12.80	8.00	700.00	292.4	LEAD CEMENT, 12.8PPG, 1.75CF/SK, 8.5GAL/SK
Event	15	Pump Tail Cement	Pump Tail Cement	8/1/2015	05:15:36	COM5	13.30	8.00	660.00	139.0	TAIL CEMENT, 13.3PPG, 1.89CF/SK, 8.66GAL/SK
Event	16	Shutdown	Shutdown	8/1/2015	05:37:17	USER					
Event	17	Clean Lines	Clean Lines	8/1/2015	05:38:48	USER					CLEAN LINES TO CELLER
Event	18	Drop Top Plug	Drop Top Plug	8/1/2015	05:41:15	USER					PLUG DROP VERIFIED BY TATTLE TAIL
Event	19	Pump Displacement	Pump Displacement	8/1/2015	05:42:04	COM5	8.37	8.00	2103.00	114.0	FRESH WATER, 1-GAL MMCR, 5-GAL CLAY WEB
Event	20	Slow Rate	Slow Rate	8/1/2015	05:59:23	USER	8.37	2.00	1854.00	10.0	SLOW RATE LAST TEN BBLS
Event	21	Bump Plug	Bump Plug	8/1/2015	06:04:53	COM5	8.39	2.00	2100.00	123.7	PLUG BUMPED, FOLLOWED BY 10 MINUTE CASING TEST
Event	22	Check Floats	Check Floats	8/1/2015	06:15:54	USER	8.32	0.00	3292.00	123.7	FLOATS HELD, 1.5 BBLS BACK
Event	23	End Job	End Job	8/1/2015	06:17:03	COM5	8.30	0.00	0.00	0.0	GOOD RETURNS THROUGH OUT JOB, 23 BBLS CEMENT TO SURFACE
Event	24	Crew Leave Location	Crew Leave Location	8/1/2015	08:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON, ANDREW BRENNECKE AND CREW

# PICEANCE - 28-07M - 4.5" PRODUCTION



① Call Out n/a;n/a;n/a;n/a ③ Crew Leave Yard n/a;n/a;n/a;n/a ⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a ⑦ Rig-Up Completed 8.34;0;5;0 ⑨ S  
 ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a ④ Arrive at Location from Service Center n/a;n/a;n/a;n/a ⑥ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a ⑧ Pre-Job Safety Meeting 8.33;0;4;0 ⑩ D

III

HALLIBURTON | iCem® Service

Created: 2015-08-01 02:37:42, Version: 4.1.107

Edit

Customer : PICEANCE ENERGY LLC - EBUS

Job Date : 8/1/2015 2:42:08 AM

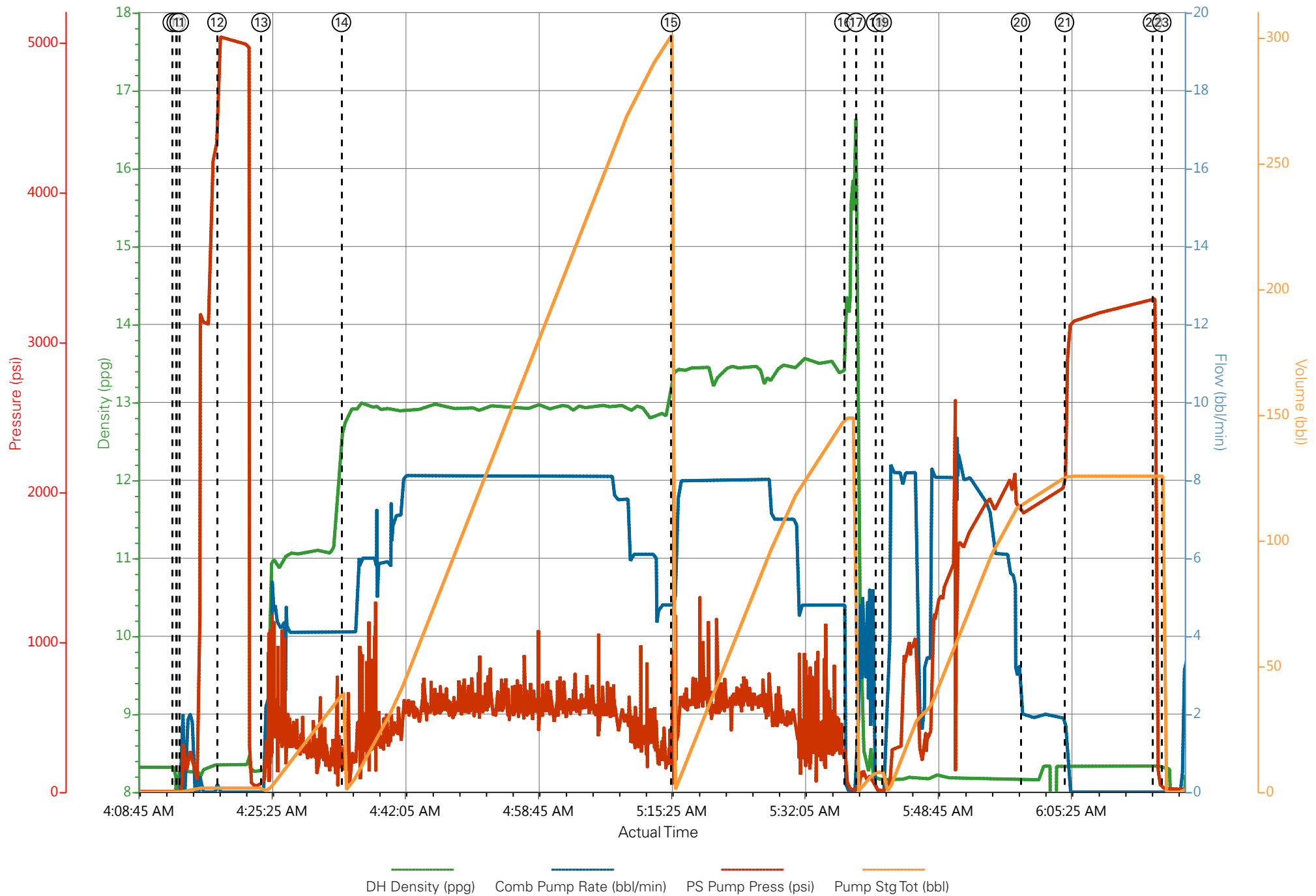
Well : 28-07M

Representative : ROGER FOSTE

Sales Order # : 902622006

ELITE#1 : A.BRENNECKE/D.MARTIN

# PICEANCE - 28-07M - 4.5" PRODUCTION



# HALLIBURTON

## Water Analysis Report

Company: PICEANCE

Submitted by: A.BRENNECKE

Attention: E.RUSSEL

Lease PICEANCE

Well # 28-07M

Date: 8/1/2015

Date Rec.: 8/1/2015

S.O.# 902622006

Job Type: PRODUCTION

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7.5</b>
Potassium (K)	<i>5000</i>	<b>200</b> Mg / L
Calcium (Ca)	<i>500</i>	<b>120</b> Mg / L
Iron (FE2)	<i>300</i>	<b>0</b> Mg / L
Chlorides (Cl)	<i>3000</i>	<b>0</b> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>&lt;200</b> Mg / L
Chlorine (Cl <sub>2</sub> )		<b>0</b> Mg / L
Temp	<i>40-80</i>	<b>68</b> Deg
Total Dissolved Solids		<b>400</b> Mg / L

Respectfully: A.BRENNECKE

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use.

<b>Sales Order #:</b> 0902622006	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 8/1/2015
<b>Customer:</b> PICEANCE ENERGY LLC - EBUS		<b>Job Type (BOM):</b> CMT PRODUCTION CASING BOM
<b>Customer Representative:</b> ROGER FOSTE		<b>API / UWI: (leave blank if unknown)</b> 05-077-10240-00
<b>Well Name:</b> PICEANCE		<b>Well Number:</b> 0080734072
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> MESA

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

### CUSTOMER SATISFACTION SURVEY

CATEGORY	CUSTOMER SATISFACTION RESPONSE	
Survey Conducted Date	The date the survey was conducted	8/1/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB58348
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	ROGER FOSTE
HSE	Was our HSE performance satisfactory? Circle Y or N	Yes
Equipment	Were you satisfied with our Equipment? Circle Y or N	Yes
Personnel	Were you satisfied with our people? Circle Y or N	Yes
Customer Comment	Customer's Comment	

CUSTOMER SIGNATURE

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*KEY PERFORMANCE INDICATORS*

General	
<b>Survey Conducted Date</b> The date the survey was conducted	8/1/2015

Cementing KPI Survey	
<b>Type of Job</b> Select the type of job. (Cementing or Non-Cementing)	0
<b>Select the Maximum Deviation range for this Job</b> What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Deviated
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	4
<b>HSE Incident, Accident, Injury</b> HSE Incident, Accident, Injury. This should be recordable incidents only.	No
<b>Was the job purpose achieved?</b> Was the job delivered correctly as per customer agreed design?	Yes
<b>Pumping Hours</b> Total number of hours pumping fluid on this job. Enter in decimal format.	2
<b>Type of Rig Classification Job Was Performed</b> Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
<b>Number Of JSAs Performed</b> Number Of Jsas Performed	5
<b>Was this a Primary Cement Job (Yes / No)</b> Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<b>Customer Non-Productive Rig Time (hrs)</b>	0

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<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> MESA

Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.	
<b>Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?</b> Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?	No
<b>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Both
<b>If a top plug was run, was the plug bumped? (Yes/No/N/A)</b> If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
<b>If applicable, was Halliburton float equipment used? (Yes/No/N/A)</b> If applicable, was Halliburton float equipment used? (Yes/No/N/A)	Yes
<b>If applicable, did the floats hold? (Yes/No/N/A)</b> If applicable, did the floats hold? (Yes/No/N/A)	Yes
<b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b> Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	97
<b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b> Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100	7
<b>If applicable, were there returns throughout the job? (Yes/No/N/A)</b> If applicable, were there returns throughout the job? (Yes/No/N/A)	Yes
<b>Nbr of Remedial Plug Jobs Rqd - HES</b> Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
<b>Nbr of Remedial Sqz Jobs Rqd - HES</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0